**Homework 32 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Exponents and Scientific Notation Period:\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Failure to show work and write in complete sentences on all problems will result in a LaSalle.**

|  |  |  |
| --- | --- | --- |
| 1. Convert the following into standard notation:  a. 256 x 10-7  b. 3.4 x 105  c. 0.45 x 10-6 | 2. Of the following numbers, which is the smallest value?  A) 6,120  B) 612 x  C) 6.12 x  D) 0.00612 x  E) 6.12 x | 3. Solve the following: |
| 4. **Without** converting into standard notation, which of the following is the smallest number? Explain.   1. 5.23 x 105 2. 5.23 x 10-3 3. 5.23 x 10-2 4. 5.23 x 10-8   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 5. Solve the following: | 6. State whether the number given in scientific notation has a large or small value.   1. 1.1 x 1012 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. 8.9 x 10-7 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. 2.0 x 10100\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. 4.567 x 10-18 \_\_\_\_\_\_\_\_\_\_\_\_ |
| 7. Your classmate says that **0.0000000432** represented in scientific notation is **4.32 x 108**. Is your classmate right or wrong? Explain and show work.  *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* | 8. Which of the following has the greatest value?  A) 3.1x  B) 31 x  C) 0.0031 x  D) 310,000  E) 0.31 x | 9. Convert the following into scientific notation:  a. 12,000  b. 0.000563  c. 557,000,000  d. 64  e. 908  f. 7 |

**Mixed Review**

|  |  |  |
| --- | --- | --- |
| 1. Write an equation of the line shown. | 2. In the figure below, line *a* is parallel to line *b*, and line *c* is parallel to line *d*. The intersections of these lines a quadrilateral. What is the measure of the missing angle?  *a b*  104 76  *c*  ?  *d*   1. 14 2. 76 3. 104 4. 180 5. None of the above | |
| 3. A circle has an area of 30 square inches. If you double the radius, what will its new area be?  A. 60 sq in  B. 120 sq in  C. 450 sq in  D. 900 sq in | 4. What is the slope of the line that goes through points (4, 2) and (1, 0)? | 5. What is the area of the circle?    A) 28  B) 196  C) 196  D)  E) none of the above |
| 6. What is the area of the triangle below? | 7. What is – 3(x – 3y) = 27 written in slope-intercept form?  A)  B)  C)  D)  E) | 8. Which describes the correct transformation to the parent graph  ()?  A. Stretch  B. Stretch, and reflection across the x-axis  C. Shrink  D. Shrink, and reflection across the x-axis  E. None of the above |